

Claim Amendments:

Claims 1 - 20 (canceled)

Claim 21 (New): A composite refractory stopper used to control the flow of molten metal consisting of

- a) a refractory core composed of ceramic materials, and
- b) a means for conducting an electric current on the surface of said refractory core.

Claim 22 (New): The composite refractory stopper in claim 21 wherein said refractory core is essentially composed of ceramic oxides.

Claim 23 (New): The composite refractory stopper in claim 21 wherein said refractory core is essentially composed of metal carbides.

Claim 24 (New): The composite refractory stopper in claim 21 wherein said refractory core is essentially composed of a combination of ceramic oxides, metal carbides and elemental carbon.

Claim 25 (New): The composite refractory stopper in claim 24 wherein said elemental carbon is in the form of graphite or carbon black.

Claim 26 (New): The composite refractory stopper in claim 21 wherein the said means of conducting an electric current on the surface of the core is an electrically conductive coating.

Claim 27 (New): The composite refractory stopper in claim 26 wherein the said electrically conductive coating is essentially composed of elemental carbon.

Claim 28 (New): The composite refractory stopper in claim 27 wherein the said elemental carbon is in the form of graphite or carbon black.

Claim 29 (New): The composite refractory stopper in claim 27 wherein said electrically conductive coating includes a bonding material that positively affixes said electrically conductive coating to the surface of said

refractory core at temperatures less than 950 degrees Fahrenheit and continues to affix said electrically conductive coating to the surface of said refractory core at temperatures above 950 degrees Fahrenheit.

Claim 30 (New): The composite refractory stopper in claim 29 wherein said bonding material positively affixes said electrically conductive coating to the surface of said refractory core such that said bonding material does not surround said elemental carbon, individually or in the aggregate, in said electrically conductive coating thereby allowing said elemental carbon to make electrical contact with a separate electrically charged element in the system.